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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/888,940      | 06/25/2001  | Tye Travis Gribb     | 66054002            | 9270             |

7590 08/05/2004

Intellectual Property Department  
DEWITT ROSS & STEVENS, S.C.  
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Madison, WI 53717-1914

EXAMINER

NGUYEN, LAM S

ART UNIT PAPER NUMBER

2853

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/888,940

Applicant(s)

GRIBB ET AL.

Examiner

LAM S NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 10-30 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-23 and 30 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12 and 24-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-5, 7-8, 10-11 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Elements or structure that support(s) the goal set by the preamble of the claimed invention are/is critical or essential to the practice of the invention, but not included in the claim(s). See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). In this case, the set goal of the claimed invention is an apparatus for detecting particles. However, the claims do not show how the first and second delay line anodes are used or structured to detect particles.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-5, 7-8, 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements. Elements or structure that support(s) the goal set by the preamble of the claimed invention are/is critical or essential to the practice of the invention, but not included in the claim(s). In this case, the set goal of the claimed invention is an apparatus for detecting particles. However, the claims do not show how the first and second delay line anodes are used or structured to detect particles.

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3. Claims 1-8, 10-12, 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted element is means for adjusting the space between the delay line anodes.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 24 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Meijer (US 3581091).

Meijer discloses a particle detector comprising:

- a. a first delay line anode having a first anode active area thereon, upon which particles impinge (FIG. 1-2, elements 2-4);
  - b. a second delay line anode having a second anode active area thereon, upon which particles are received from the first delay line anode (FIG. 1-2, elements 5-7);
- wherein no structure is interposed between the first anode active area and the second anode active area (FIG. 1-2).

**Referring to claim 28:** wherein the first and second delay line anodes each include a signal layer (FIG. 1-2, elements 3, 6) and a ground layer (FIG. 1-2, elements 4, 7) with a dielectric layer interposed therebetween (FIG. 1-2, elements 2, 5), the signal layer having an

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elongated signal line defined thereon, and wherein the signal line of the first delay line anode is identical to the signal line of the second delay line anode (FIG. 1-2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meijer (US 3581091) in view of Mendez et al. (US 3359421).

Meijer discloses the claimed invention as discussed above except wherein the first anode active area and second anode active area are space by vacuum of a gas.

Mendez et al. disclose an apparatus for detecting and locating the trajectories of charged particles (column 1, lines 10-15) having a plurality of anodes spaced apart (FIG. 1, elements 14, 16, 17), wherein the space is filled with a noble gas such as He, Ne (FIG. 1, element 13).

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the particle detector disclosed by Meijer such as filling a gas into the space between the anodes as disclosed by Mendez et al. The motivation of doing so is to provide improved means for detecting and recording the charged particle tracks as taught by Mendez et al. (column 2, lines 64-66).

***Allowable Subject Matter***

Claim 13-23, 30 are allowed and Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Referring to claims 13, 29, 30:** The most pertinent prior art fails to disclose wherein at least a portion of the second anode active area has the thickness of its second anode dielectric layer being identical to that of the first anode dielectric layer in the first anode active area.

Claims 14-23 are allowed because they depend directly/indirectly on claim 13 or 26.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 24 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM S NGUYEN whose telephone number is (571)272-2151. The examiner can normally be reached on 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D MEIER can be reached on (571)272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN

July 23, 2004



**HAI PHAM**  
**PRIMARY EXAMINER**